

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A computerized, Internet protocol (IP) based voice response system for servicing a call received over a public switched telephone network (PSTN), the voice response system comprising:

a PSTN-to-IP gateway for connecting to the public switched telephone network;

an IP network medium connected to the gateway; ~~and~~

a network server in communication with the IP network medium for automated interaction with a user participating in the call; and

a configuration server for providing automated dynamic management of the network server.

2. (Original) The voice response system of claim 1, wherein the network server comprises a host computer for executing a voice application program, a grammar database corresponding to a set of recognizable utterances, and a voice recognition engine for comparing a speech input from the user against the set of recognizable utterances.

3. (Original) The voice response system of claim 2, wherein the voice application program is a VoiceXML program.

4. (Original) The voice response system of claim 2, further comprising a firewall in communication with the network medium for connecting the network server to an external IP network through the firewall, wherein the voice application program is remotely hosted on the external IP network.

5. (Original) The voice response system of claim 2, wherein the network server performs call control communications with the PSTN-to-IP gateway in accordance with a SIP protocol.

6. (Currently Amended) A scalable, computerized, Internet protocol (IP) based voice response system for servicing a plurality of calls received over a public switched telephone network (PSTN) comprising:

- a PSTN-to-IP gateway for connecting to the public switched telephone network;

- an IP network medium connected to the gateway;

- a plurality of network servers in communication with the network medium for automated interaction with a set of users participating in the plurality of calls; and

- a proxy server in communication with the PSTN-to-IP gateway for load balancing the plurality of calls and providing call discrimination amongst the plurality of network servers.

7. (Original) The voice response system of claim 6, wherein each network server of the plurality of network servers comprises a host computer having a distinct network identification number.

8. (Original) The voice response system of claim 7, further comprising a configuration server for automatically loading and configuring an initial software environment for the host computer during its initial bootup sequence based upon the network identification number.

9. (Currently Amended) A method of using voice over Internet protocols (VoIP) to handle circuit switched calls in a voice activated system, the method comprising:

terminating a circuit switched call at a conversion device that translates the circuit switched call into a VoIP format as a packet switched call;

forwarding the packet switched call in the VoIP format from the conversion device to a computer system in accordance with at least one call discrimination rule; and

performing speech recognition on the call using audio data extracted from the VoIP format by the computer system.

10. (Original) The method of claim 9, wherein the conversion device and the computer system are located in close physical proximity.

11. (Original) The method of claim 9, wherein there is a second computer system physically distant from the conversion device and wherein the forwarding goes to the second computer system responsive to a failure of the first computer system.

12. (Original) The method of claim 9, further comprising prior to the forwarding sending a message from the conversion device to a second computer system, the second computer system selecting the computer system from a plurality of computer systems to receive the call.

13. (Original) The method of claim 12, wherein the selecting according to a predetermined set of criteria to

balance number of calls being handled by each of the plurality of computer systems.

14. (Original) The method of claim 12, wherein the message comprises a session initiation protocol (SIP) request.

15. (Original) The method of claim 12, wherein the forwarding occurs responsive to a SIP acknowledgement from the computer system.

16. (New) The voice response system of claim 1, further including a proxy server, wherein the configuration server directs the proxy server how to perform call discrimination.

17. (New) The voice response system of claim 16, wherein call discrimination can allow calls on an entity basis.

18. (New) The voice response system of claim 16, wherein call discrimination can disallow calls on an entity basis.

19. (New) The voice response system of claim 16, wherein the configuration server provides re-purposing of at least one of the proxy server and the network server.

20. (New) The voice response system of claim 1, further including a proxy server, wherein if the proxy server detects that a number of calls exceeds a predetermined threshold, then the proxy server follows at least one predetermined call routing rule provided by the configuration server.

21. (New) The voice response system of claim 20, wherein the predetermined call routing rules include sending a busy signal to a first entity and allowing calls to a second entity.

22. (New) A computerized, Internet protocol (IP) based voice response system for servicing a call received over a public switched telephone network (PSTN), the voice response system comprising:

- a PSTN-to-IP gateway for connecting to the public switched telephone network;

- an IP network medium connected to the gateway;

- a network server in communication with the IP network medium for automated interaction with a user participating in the call; and

- a proxy server in communication with the IP network medium and the network server, wherein the proxy server provides call discrimination.

23. (New) The voice response system of claim 22, wherein call discrimination can allow calls on a per client basis.

24. (New) The voice response system of claim 22, wherein call discrimination can disallow calls on a per client basis.

25. (New) The voice response system of claim 22, wherein if the proxy server detects that a number of calls exceeds a predetermined threshold, then call discrimination includes following predetermined call routing rules.

26. (New) The voice response system of claim 25, wherein the predetermined call routing rules include sending a busy signal to a first client and allowing calls to a second client.

27. (New) The voice response system of claim 22, wherein the network server and proxy server are dynamically reconfigurable.

28. (New) The voice response system of claim 27, wherein dynamic reconfiguration includes mapping a new software configuration.

29. (New) A computerized, Internet protocol (IP) based voice response system for servicing a call received over a public switched telephone network (PSTN), the voice response system comprising:

- a PSTN-to-IP gateway for connecting to the public switched telephone network;

- an IP network medium connected to the gateway;

- a network server in communication with the IP network medium for automated interaction with a user participating in the call; and

- means for providing call discrimination in operative relation to the IP network medium and the network server.

30. (New) The voice response system of claim 29, wherein call discrimination can allow calls on a per client basis.

31. (New) The voice response system of claim 29, wherein call discrimination can disallow calls on a per client basis.

32. (New) The voice response system of claim 29, wherein if a number of calls exceeds a predetermined threshold, then the means for providing call discrimination follows predetermined call routing rules.

33. (New) The voice response system of claim 32, wherein the predetermined call routing rules include sending a busy signal to a first client and allowing calls to a second client.

34. (New) The voice response system of claim 29, wherein the means for providing call discrimination can be dynamically reconfigured.

35. (New) The voice response system of claim 34, wherein dynamic reconfiguration includes a new setup of the proxy server.